

# Abstracts

These selected abstracts and titles from the world literature are arranged in the following sections:

*Syphilis and other treponematoses (clinical and treatment; serology and biological false positive phenomenon; pathology and experimental)*  
*Gonorrhoea (clinical; microbiology; treatment)*  
*Chlamydial infections*  
*Non-specific genital infection*  
*Reiter's disease*

*Trichomoniasis*  
*Candidosis*  
*Genital herpes*  
*Other sexually transmitted diseases*  
*Public health and social aspects*  
*Miscellaneous*

## Syphilis and other treponematoses (clinical and treatment)

**Endemic treponematoses in the 1980's**  
 EDITORIAL *Lancet* 1983; ii: 551.

### Resurgence of yaws in Ghana

VK AGADZI, Y ABOAGYE-ATTA, J NELSON, ET AL (Ministry of Health, Accra, Ghana). *Lancet* 1983; ii: 389-90.

### The stigmata of late congenital syphilis: an analysis of 100 patients

NJ FIUMARA AND S LESSELL (Massachusetts Department of Public Health, Boston, Massachusetts, USA). *Sex Transm Dis* 1983; 10: 126-9.

### Treponemicidal levels of amoxicillin in cerebrospinal fluid after oral administration

WR FABER, JD BOS, PJGM RIETRA, ET AL (University of Amsterdam, Amsterdam, Netherlands). *Sex Transm Dis* 1983; 10: 148-50.

Seven patients in various stages of syphilis were treated by oral administration of amoxicillin (6 g daily) and probenecid (2 g daily) for 15 days. The treponemicidal concentration of amoxicillin was studied by a *Treponema pallidum* immobilisation assay and found to be 0.070 mg/l, as compared with penicillin 0.003 mg/l. Taking into account the WHO recommended penicillin concentration of 0.018 mg/l, the minimal concentration of amoxicillin was estimated as 0.42 mg/l. This concentration was obtained in the serum and cerebrospinal fluid (CSF) of all patients treated with the above mentioned oral combination. It is

concluded that treponemicidal levels of amoxicillin can be obtained in the CSF after oral administration. The amoxicillin regimen described may be a valuable alternative to single dose parenteral penicillin in the treatment of patients with syphilis when the CNS is thought to be affected, provided that reasonable compliance can be obtained.

Authors' summary

## Syphilis (serology and biological false positive phenomenon)

### Haemagglutination treponemal tests for syphilis

G FRIEDLY, MV ZARTARIAN, JC WOOD, ET AL (Orange County Medical Center, Orange, California, USA). *J Clin Microbiol* 1983; 18: 775-8.

**A simplified ELISA method for syphilis**  
 L POSPISIL (JE Purkinje University, Brno, Czechoslovakia). *Dermatologica* 1983; 167: 105-8.

## Syphilis (pathology and experimental)

### Identification and preliminary characterisation of *Treponema pallidum* protein antigens expressed in *Escherichia coli*

LV STAMM, TC KERNER Jr, VA BANKAITIS, AND PJ BASSFORD Jr (University of North Carolina, Chapel Hill, North Carolina, USA). *Infect Immun* 1983; 41: 709-21.

### Development of monoclonal antibodies that recognise *Treponema pallidum*

JM SAUNDERS, AND JD FOLDS (University of North Carolina, Chapel Hill, North Carolina, USA). *Infect Immun* 1983; 41: 844-7.

### Inhibition of macromolecular syntheses in cultured rabbit cells by *Treponema pallidum* (Nicholls)

GHW WONG, BM STEINER, AND S GRAVES (Walter and Eliza Hall Institute of Medical Research, Parkville, Victoria, Australia). *Infect Immun* 1983; 41: 636-43.

### Immune serum confers protection against syphilitic infection on hamsters

AA AZADEGAN, RF SCHELL, AND J LEFROCK (Hahneman University, Philadelphia, Pennsylvania, USA). *Infect Immun* 1983; 42: 42-7.

### Molecular cloning and expression of *Treponema pallidum* DNA in *Escherichia coli* K-12

JD VAN EMBDEN, HJ VAN DER DONK, RV VAN ELJK, ET AL (State Institute of Public Health, Bilthoven, Netherlands). *Infect Immun* 1983; 42: 187-96.

## Gonorrhoea (clinical)

### One gram cefoxitin cures uncomplicated gonococcal urethritis caused by penicillinase producing *Neisseria gonorrhoeae*

RL SANCHEZ, FS WIGNALL, TR ZAJDOWICZ, ET AL (US Naval Hospital, San Diego, California, USA). *Sex Transm Dis* 1983; 10: 135-7.

**Po, lital cyst involvement with gonococcal arthritis-dermatitis syndrome**  
SR WEINER AND P FAN (Wadsworth Veterans Administration Hospital, Los Angeles, California, USA). *Sex Transm Dis* 1983; 10: 141-3.

***Neisseria gonorrhoeae* conjunctivitis**  
E ALFONSO, B FRIEDLAND, S HUPP, *ET AL* (Miami, Florida, USA) *JAMA* 1983; 250: 794-5.

**The Fitz-Hugh Curtis syndrome**  
H MICHEL AND C PEREZ (Hôpital St Eloi, Montpellier, France). *La Press Médicale* 1983; 12: 1969-70.

**Ophthalmia neonatorum caused by  $\beta$ -lactamase producing *Neisseria gonorrhoeae***

B DORAISWAMY, MR HAMMERSCHLAG, AND GF PRINGLE (Downstate Medical Center, Brooklyn, New York, USA). *JAMA* 1983; 250: 790-1.

**Pulmonary valve gonococcal endocarditis. A forgotten disease**

MH ROSOFF, MV COHEN, AND G JACQUETTE (Division of Cardiology and Department of Medicine, Montefiore Hospital, New York, USA). *Br Heart J* 1983; 50: 290-2.

A 66 year old chronically ill man who two months before admission had had a urethral discharge which resolved after two weeks, was admitted with night sweats, chills, and cough and with weight loss of two weeks' duration. Tachycardia and fever spiking to 39°C were present. There were no chest murmurs or râles, but the liver was enlarged, there was finger clubbing, and multiple 3-4 mm petechiae over the ankles. The initial blood cultures gave negative results, but an early systolic murmur was heard at the left sternal border on day 10. Two of four blood cultures obtained on day 11 grew *Neisseria gonorrhoeae*, and treatment with intravenous penicillin was begun. On day 12 an M-mode echocardiogram showed dense shaggy echoes on the posterior pulmonary valve cusp and cross sectional echocardiography indicated a 2 cm mobile vegetation.

The patient's recovery was complicated by reactions to penicillin and cefoxitin (treatment being completed with intramuscular spectinomycin), intercurrent renal failure necessitating peritoneal dialysis, followed by peritonitis requiring four

weeks' treatment with vancomycin and gentamicin. On day 59 a new decrescendo murmur was heard at the left sternal border, and right ventricular enlargement and paradoxical septal motion noted in a repeat echocardiogram were consistent with pulmonary insufficiency. He was discharged on day 82 with repeatedly negative blood cultures and renal function returning to normal. He remained well one year after discharge.

Before 1942 gonococcal endocarditis was relatively common, causing up to 26% of reported cases of endocarditis. Since the introduction of antibiotics such infections have only rarely been reported despite the upsurge of gonorrhoea in recent years.

R R Willcox  
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## Gonorrhoea (microbiology)

**Studies on the mechanism of bacterial resistance to complement mediated killing IV. C5 b-9 forms high molecular weight complexes with bacterial outer membrane constituents on serum-resistant but not serum sensitive *Neisseria gonorrhoeae***  
KA JOINER, KA WARREN, EJ BROWN, *ET AL* (National Institute of Allergy and Infectious Diseases, Bethesda, Maryland, USA). *J Immunol* 1983; 131: 1443-51.

**125 I-labelled peptide mapping and high performance liquid chromatography: 125 I-peptide separation of protein I of four strains of *Neisseria gonorrhoeae***  
RC JUDD (University of Montana, Missoula, Montana, USA). *J Liq Chromatog* 1983; 6: 1421-40.

**Induction of serum resistance in recent isolates of *Neisseria gonorrhoeae* by a low molecular weight fraction of guinea pig serum**

PMV MARTIN, PV PATEL, NJ PARSONS, AND H SMITH (Department of Microbiology, The University of Birmingham, Birmingham, UK). *J Infect Dis* 1983; 148: 334.

**Antibody response in rabbits to gonococcal lipopolysaccharide bovine serum albumin conjugates**

E RODAHL AND JA MAELUND (University of Trondheim, Trondheim, Norway). *Acta Path Microbiol Scand C* 1983; 91: 285-90.

**Auxotyping of *Neisseria gonorrhoeae* isolated in the United Kingdom**

CG COPLEY AND SI EGGLESTONE (Public Health Laboratory, Myrtle Road, Kingsdown, Bristol, UK). *J Med Microbiol* 1983; 16: 295-302.

Auxotyping of *Neisseria gonorrhoeae* is a useful epidemiological marker and has been performed in many countries for a number of years. There is, however, no information available on the prevalence of auxotypes of *N. gonorrhoeae* isolated in this country. These authors (from the new Gonococcus Reference Laboratory) have started to remedy this situation by reporting the results of auxotyping 120 consecutive isolates from the county of Avon in the United Kingdom. The distribution of penicillin susceptibilities among the different auxogroups was also determined.

The paper details the formulation of a simplified auxotyping medium and describes the methodology to be observed for obtaining unequivocal and reproducible results. Requirements for proline (Pro), arginine (Arg), hypoxanthine (Hyp), uracil (Ura) and methionine (Met) were determined using this method. Non-requiring strains (prototrophic) were the most commonly isolated (29.9%), and were a heretogenous group as judged by penicillin susceptibility testing. The Arg-Hy-Ura auxogroup was found to be generally susceptible to penicillin and represented 27.5% of isolates. In other countries this group is associated with disseminated gonococcal infections, but there was no evidence for this in the Avon area. The Pro-Arg-Ura auxogroup (10% of isolates) which corresponds to the Pro-Cit-Ura auxogroup described by other workers, had the narrowest range of penicillin susceptibility and also did not carry the 2.6 Megadalton cryptic plasmid.

G D Morrison

**Quantitative disc method for storage of *Neisseria gonorrhoeae***

ME MCBRIDE (Baylor College of Medicine, Houston, Texas, USA). *Sex Transm Dis* 1983; 10: 111-3.

**The isolation of *Neisseria gonorrhoeae*: a comparison of three culture transport mechanisms**

MR SPENCE, DS GUZICK, AND LR KATTA (Johns Hopkins Hospital, Baltimore, Maryland, USA). *Sex Transm Dis* 1983; 10: 138-40.

**Phagocytic killing of *Neisseria gonorrhoeae* by human monocytes**

JR MEZZATESTA AND RF REST (Hahneman University, Philadelphia, Pennsylvania, USA). *Infect Immun* 1983; 42:99-105.

**Gonorrhoea (treatment)****Comparative study of ceftriaxone and spectinomycin for treatment of uncomplicated gonorrhoea in men**

HH HANDSFIELD AND VL MURPHY (Harborview Medical Center, Seattle, Washington, USA). *Lancet* 1983; ii: 67-70.

All 31 men with gonorrhoea treated with single intramuscular injections of 125 mg ceftriaxone were cured, as were 28 others given 250 mg (a total of 53 urethral and 14 rectal infections). These results compared with two failures in a series of 58 patients given 2.0 g spectinomycin (two in 52 urethral and one in 22 rectal infections). Both drugs failed to prevent post-gonococcal urethritis which developed in 11 of 44 patients given ceftriaxone and nine of 47 given spectinomycin who attended for a second follow up visit 14-30 days after treatment.

No particular clinical, haematological, urinary, or biochemical adverse side effects were noted with either treatment. Ceftriaxone has the advantage of being readily soluble, and 125 mg can be dissolved in 0.5 ml distilled water and injected through small gauge needles into the deltoid muscle.

R R Willcox

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**Non-specific genital infection****Non specific vaginitis and other genital infections in three clinic populations**

LH HILL, H RUPARELIA, AND JA EMBIL (Dalhousie University and Victoria General Hospital, Halifax, Nova Scotia, Canada). *Sex Transm Dis* 1983; 10: 114-8.

**Persistent non-gonococcal urethritis associated with a minocycline resistant strain of *Ureaplasma urealyticum*—a case report**

M MAGALHAES (University of Pernambuco, Brazil). *Sex Transm Dis* 1983; 10: 151-2.

***Mycoplasma hominis*—a neglected human pathogen**

P-A MÅRDH (University of Lund, Lund, Sweden). *European Journal of Clinical Microbiology* 1983; 2:303-8.

**Chlamydial infections****Rifampin in chlamydial infections**

J SCHACHTER (San Francisco General Hospital, San Francisco, USA). *Rev Infect Dis* 1983; 5: suppl 3: 562-4.

**In vitro activity of rifamycins alone and in combination with other antibiotics against *Chlamydia trachomatis***

RB JONES, GL RIDGWAY, S BOULDING, AND KL HUNLEY (Indiana University School of Medicine, Indianapolis, Indiana, USA). *Rev Infect Dis* 1983; 5: suppl 3: 556-61.

**Evaluation of calcium alginate tipped aluminium swabs transported in Culturettes<sup>®</sup> containing ampoules of 2-sucrose phosphate medium for recovery of *Chlamydia trachomatis***

TF SMITH AND LA WEED (Mayo Clinic, Rochester, USA). *Am J Clin Pathol* 1983; 80:213-5.

**Comparison of two commercially available isolation systems for *Chlamydia trachomatis***

US BASELSKI, MK ROBISON, AND BR JENNINGS (University of Tennessee, Nashville, Tennessee, USA). *J Clin Microbiol* 1983; 18:476-9.

**Immunoassay for detecting *Chlamydia trachomatis* major outer membrane protein**

HD CALDWELL AND J SCHACHTER (National Institute for Allergy and Infectious Diseases, Hamilton, Montana, USA). *J Clin Microbiol* 1983; 18:539-45.

**Is there immunity to chlamydial infection in the human genital tract?**

J SCHACHTER, LD CLES, RM RAY, AND FE HESSE (Department of Laboratory Medicine, University of California, San Francisco, USA). *Sex Transm Dis* 1983; 10: 123-5.

**Comparison of rosaramycin and erythromycin stearate for treatment of cervical infection with *Chlamydia trachomatis***

HG ROBSON, PP SHAH, RG LALONDE, ET AL (Royal Victoria Hospital and McGill University, Montreal, Canada). *Sex Transm Dis* 1983; 10: 130-4.

**Cervical *Chlamydia trachomatis* and mycoplasmal infections in pregnancy**

HR HARRISON, ER ALEXANDER, L WEINSTEIN, ET AL (Arizona Health Science Center, Tucson, Arizona, USA). *JAMA* 1983; 250: 1721-7.

**Detection of antichlamydial immunoglobulin G and M antibodies by enzyme linked immunosorbent assay**

JB MAHONY, J SCHACHTER, AND MA CHERNESKY (McMaster University, Hamilton, Ontario, Canada). *J Clin Microbiol* 1983; 18:270-5.

**Amino acid requirements of strains of *Chlamydia trachomatis* and *C psittaci* growing in McCoy Cells—relationship with clinical syndrome and host origin**  
I ALLAN AND JH PEARCE (University of Birmingham, Birmingham, UK). *J Gen Microbiol* 1983; 129:2001-8.

**Immunotypes of *Chlamydia trachomatis* isolates in Seattle, Washington**

CC KUO, SP WANG, KK HOLMES, AND JT GRAYSTON (University of Washington, Seattle, Washington, USA). *Infect Immun* 1983; 41:865-8.

**Chlamydiae and viruses causing sexually transmitted diseases—analogs with infections in animals: a review**

JD ORIEL (University College Hospital, London, UK). *J R Soc Med* 1983; 76:602-8.

**Practice research: *Chlamydia trachomatis* and *Neisseria gonorrhoeae* infections in women attending inner city general practices**

LJ SOUTHGATE, JD TREHARNE, AND T FORSEY (St. Bartholomews Hospital, London, UK). *Br Med J* 1983; 287: 879-81.

## Trichomoniasis

### Natural macrophage cytotoxicity against *Trichomonas vaginalis* is mediated by soluble lytic factors

MG MARTINOTTI, F COFANO, P MARTINETTO, AND S LANDOLFO (University of Turin, Turin, Italy). *Infect Immun* 1983; **41**: 1144-9.

### Beta-haemolytic activity of *Trichomonas vaginalis* correlates with virulence

JN KRIEGER, MA POISSON, AND MF REIN (University of Virginia School of Medicine, Charlottesville, Virginia, USA). *Infect Immun* 1983; **41**: 1291-5.

### Immune response to *Trichomonas vaginalis* IV. Immunochemical and immunobiological analysis of *Trichomonas vaginalis* antigen

A YANO, K YUI, F AOSAI, ET AL (Shinsu University, Matsumoto, Nagano, Japan). *Int Arch Allergy Appl Immunol* 1983; **72**: 150-7.

### Susceptibility of *Trichomonas vaginalis* strains to metronidazole: response to treatment

ED RALPH, R DARWISH, TW AUSTIN, ET AL (Department of Medicine, University of Western Ontario, London, Ontario, Canada). *Sex Transm Dis* 1983; **10**: 119-22.

### Viability of *Trichomonas vaginalis* in vitro at four temperatures

RF SMITH (Department of Public Health, Martinez, California, USA). *J Clin Microbiol* 1983; **18**: 834-6.

## Candidosis

### Characterisation of *Candida albicans* adherence to human vaginal epithelial cells in vitro

JC LEE AND RD KING (Harvard University, Boston, Massachusetts, USA). *Infect Immun* 1983; **41**: 1024-30.

### Comparison of ketoconazole, Bay N133 and Bay L9139 in the treatment of experimental vaginal candidiasis

JD SOBEL AND G MULLER (Medical College of Pennsylvania, Philadelphia, USA). *Antimicrob Agents Chemother* 1983; **24**: 434-6.

## Genital Herpes

### Rapid detection and identification of herpes simplex virus in cell culture by a direct immunoperoxidase staining procedure

MJ MILLER AND CL HOWELL (University of California, Los Angeles, USA). *J Clin Microbiol* 1983; **18**: 550-3.

### The management of herpes simplex in pregnant women and neonates

WC MARSHALL AND CS PECKHAM (Institute of Child Health, London, UK). *J Infect* 1983; **6** suppl 1: 23-30.

### Incidence and trend of herpes progenitalis: a 15 year population study

TY CHUANG, WPD SU, AND HO PERRY (Mayo Clinic, Rochester, USA). *Mayo Clin Proc* 1983; **58**: 436-42.

### Sexual and socioeconomic factors affecting the risk of past infections with herpes simplex virus type-2

KM STAVRAKY, WE RAWLS, AND J CHIAVETTA (University of Western Ontario, London, Ontario, Canada). *Am J Epidemiol* 1983; **118**: 109-21.

### Determination of herpes simplex virus type 2 specific antibodies by enzyme linked immunosorbent assay

RM COLEMAN, L PEREIRA, PD BAILEY, ET AL (Emory University School of Medicine, Atlanta, Georgia, USA). *J Clin Microbiol* 1983; **18**: 287-91.

### Recurrent herpes simplex infections and erythema multiforme: a report of three patients

NJ FIUMARA AND J SOLOMON (Boston Dispensary, Boston, Massachusetts, USA). *Sex Transm Dis* 1983; **10**: 144-7.

## Other sexually transmitted diseases

### Short course and single dose antimicrobial therapy for chancroid in Kenya: studies with rifampin alone and in combination with trimethoprim

FA PLUMMER, H NZANZE, LJ D'COSTA, ET AL (University of Manitoba, Winnipeg, Manitoba, Canada). *Rev Infect Dis* 1983; **5** suppl 3: 565-72.

### Locally injected bleomycin in the treatment of warts

M MUNKVAD, J GENNER, B STABERG, ET AL (Finsen Institute, Copenhagen, Denmark). *Dermatologica* 1983; **167**: 86-9.

### Sexually transmitted diseases in sexually abused children

ST WHITE, FA LODA, DL INGRAM, AND A PEARSON (Wake County Medical Center, Raleigh, North Carolina, USA). *Pediatrics* 1983; **72**: 16-21.

Between 1976 and 1980, 409 cases of alleged sexual abuse in children under 13 years old were evaluated by the Child Medical Evaluation Program in North Carolina. Less than 10% of the victims, who were predominantly girls, showed physical evidence of assault. Of the 409 children, 54 (13%) had a sexually transmitted disease. There were 46 cases of gonorrhoea (only nine were symptomatic), six cases of syphilis (five were latent and four also had gonorrhoea), four of trichomoniasis, and three of genital warts.

Although sexual abuse of girls was most commonly perpetrated by the father or stepfather, those with gonorrhoea were most frequently infected by another relative or non family member. Gonorrhoea in boys was nearly always homosexually acquired.

The authors recommend screening by means of urethral, vaginal, anal, and throat cultures for gonorrhoea, 'wet' slides for trichomoniasis, and Venereal Disease Research Laboratory serological tests for syphilis. It appears, however, that only a minority of the 409 children were fully screened.

J R Willcox

### Human papilloma virus in cervical condylomata (an immunohistochemical study)

GM MARIUZZI, CA BELTRAMIC, DI LORETTO, ET AL (University of Ancona, Ancona, Italy). *Ric Clin Lab* 1983; **13**: 255-60.

**Semiquantitative culture of *Gardnerella vaginalis* in laboratory determination of non-specific vaginitis**

S TARNAM AND BL FITZGERALD (Newfoundland and Labrador Public Health Laboratories, St. Johns, Newfoundland, Canada). *J Clin Microbiol* 1983;18:344-7.

**Susceptibility of *Gardnerella vaginalis* to cephadrine**

EJC GOLDSTEIN, YY KWOK, AND VL SUTTER (RM Alden Research Laboratory, San Francisco, USA). *Antimicrob Agents Chemother* 1983;24:418-9.

**Hepatitis B surface antigen could harbour the infectious agent of AIDS**

MI McDONALD, JD HAMILTON, AND DT DURACK (Duke University Medical Center, Durham, North Carolina, USA). *Lancet* 1983;ii:882-4.

**Role of hepatitis B in acquired immunodeficiency syndrome**

RF RAVENHOLT (Bethesda, Maryland, USA). *Lancet* 1983;ii:885-8.

**Acquired immunodeficiency syndrome with severe gastro-intestinal manifestations in Haiti**

R MALEBRANCHE, E ARNOUX, JM GUÉRIN, ET AL (Port au Prince, Haiti). *Lancet* 1983;ii:873-7.

**Oropharyngeal *Haemophilus ducreyi* infection**

GR KINGHORN, S HAFIZ, AND MG McENTEGART (Royal Hallamshire Hospital, Sheffield, UK). *Br Med J* 1983;287:650.

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*Public health and social aspects*

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**National case-control of study of Kaposi's sarcoma and *Pneumocystis carinii* pneumonia in homosexual men: Part 1 Epidemiologic results. Part 2 Laboratory results**

TASK FORCE ON ACQUIRED IMMUNE DEFICIENCY SYNDROME (Centers for Disease Control, Atlanta, Georgia, USA). *Ann Intern Med* 1983;99:145-54.

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*Miscellaneous*

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**Solitary penile ulcer associated with infectious mononucleosis**

D LAWEE AND MS SHAFIR (Toronto General Hospital, Toronto, Canada). *Can Med Assoc J* 1983;129:146-70.